Claims 59-62 have been amended to read as follows:

A2

59. (Amended)A method of inducing apoptosis in mammalian cancer cells comprising exposing mammalian cancer cells to an effective amount of monoclonal antibody which (a) binds to Apo-2 polypeptide consisting of the contiguous amino acid residues 1 to 411 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cancer cell *in vivo* or *ex vivo*.

60. (Amended) The method of claim 59 wherein said antibody comprises a single-chain antibody.

61. (Amended) A method of treating mammalian cancer cells comprising exposing mammalian cancer cells to an effective amount of monoclonal antibody which (a) binds to Apo-2 polypeptide consisting of the contiguous amino acid residues 1 to 411 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cancer cell *in vivo* or *ex vivo*.

62. (Amended) The method of claim 61 wherein said antibody comprises a single-chain antibody.

The following claims have been added:

A3

--65. A method of inducing apoptosis in mammalian cancer cells comprising exposing mammalian cancer cells to an effective amount of monoclonal antibody which (a) binds to a soluble extracellular domain sequence of an Apo-2 polypeptide consisting of amino acids 54 to 182 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cell *in vivo* or *ex vivo*.

A3

66. A method of inducing apoptosis in mammalian cancer cells comprising exposing mammalian cancer cells to an effective amount of monoclonal antibody which (a) binds to a soluble extracellular domain sequence of an Apo-2 polypeptide consisting of amino acids 1 to 182 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cell *in vivo* or *ex vivo*.

67. A method of treating mammalian cancer cells comprising exposing mammalian cancer cells to an effective amount of monoclonal antibody which (a) binds to a soluble extracellular domain sequence of an Apo-2 polypeptide consisting of amino acids 54 to 182 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cell *in vivo* or *ex vivo*.

68. A method of treating mammalian cancer cells comprising exposing mammalian cancer cells to an effective amount of monoclonal antibody which (a) binds to a soluble extracellular domain sequence of an Apo-2 polypeptide consisting of amino acids 1 to 182 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cell *in vivo* or *ex vivo*

69. The method of claim 59, 65, or 66, wherein said antibody is a chimeric antibody.

70. The method of claim 59, 65, or 66, wherein said antibody is a humanized antibody.

71. The method of claim 59, 65, or 66, wherein said antibody is a human antibody.

72. The method of claim 59, 65, or 66, wherein said antibody comprises an Fab fragment.

A3

73. The method of claim 59, 65, or 66, wherein said antibody comprises a scFv fragment.

74. The method of claim 59, 65, or 66, wherein said antibody comprises a F(ab')2 fragment.

75. The method of claim 59, 65, or 66, wherein said antibody binds to the same epitope as the epitope to which the monoclonal antibody produced by the hybridoma cell line deposited as ATCC accession number HB-12456 binds.

76. The method of claim 59, 65, or 66, wherein said antibody comprises the 16E2 antibody.

77. The method of claim 59, 65, or 66, wherein said antibody comprises the 20E6 antibody.

78. The method of claim 59, 65, or 66, wherein said antibody comprises the 24C4 antibody.

79. The method of claim 59, 65, or 66, wherein said antibody is fused to an epitope tag sequence.

80. The method of claim 59, 65, or 66, wherein the cancer cells are colon or colorectal cancer cells.

81. The method of claim 59, 65, or 66, wherein the cancer cells are lung cancer cells.

82. The method of claim 59, 65, or 66, wherein the cancer cells are breast cancer cells.

A3

83. The method of claim 61, 67, or 68, wherein said antibody is a chimeric antibody.

84. The method of claim 61, 67, or 68, wherein said antibody is a humanized antibody.

85. The method of claim 61, 67, or 68, wherein said antibody is a human antibody.

86. The method of claim 61, 67, or 68, wherein said antibody comprises an Fab fragment.

87. The method of claim 61, 67, or 68, wherein said antibody comprises a scFv fragment.

88. The method of claim 61, 67, or 68, wherein said antibody comprises a F(ab')2 fragment.

89. The method of claim 61, 67, or 68, wherein said antibody binds to the same epitope as the epitope to which the monoclonal antibody produced by the hybridoma cell line deposited as ATCC accession number HB-12456 binds.

90. The method of claim 61, 67, or 68, wherein said antibody comprises the 16E2 antibody.

91. The method of claim 61, 67, or 68, wherein said antibody comprises the 20E6 antibody.

92. The method of claim 61, 67, or 68, wherein said antibody comprises the 24C4 antibody.

A3

93. The method of claim 61, 67, or 68, wherein said antibody is fused to an epitope tag sequence.

94. The method of claim 61, 67, or 68, wherein said mammalian cancer cells are exposed to chemotherapy or radiation therapy.

95. The method of claim 61, 67, or 68, wherein the cancer cells are colon or colorectal cancer cells.

96. The method of claim 61, 67, or 68, wherein the cancer cells are lung cancer cells.

97. The method of claim 61, 67, or 68, wherein the cancer cells are breast cancer cells. --